



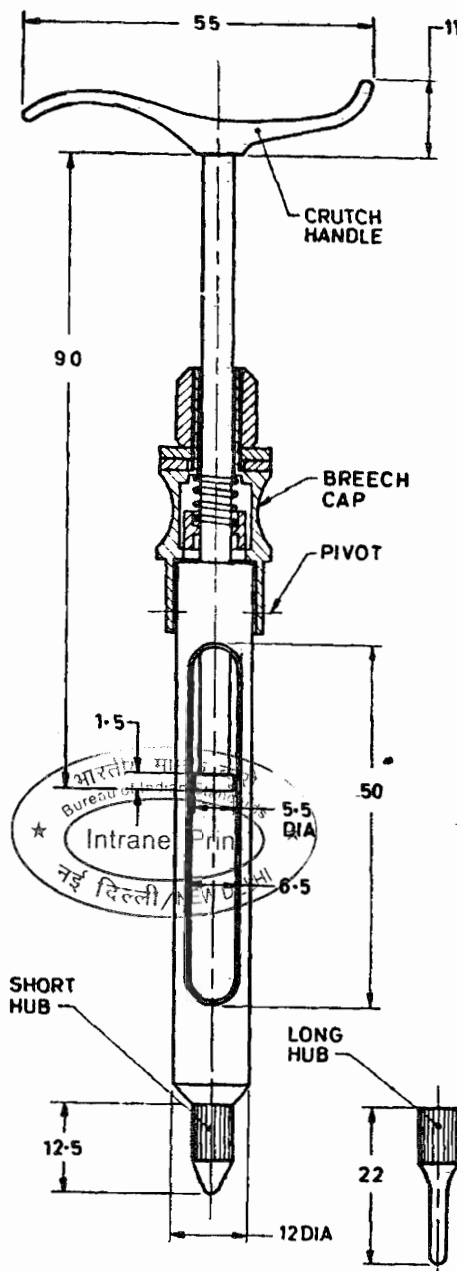
Indian Standard

(Reaffirmed 1998)
(Reaffirmed 2013)

SPECIFICATION FOR SYRINGE, HYPODERMIC, CARTRIDGE, DENTAL, PIVOT BREECH CAP TYPE

1. **Scope** — Dimensions and other requirements for dental hypodermic cartridge syringe of pivot breech cap type to be used with cartridge needles conforming to IS: 5180-1969*.

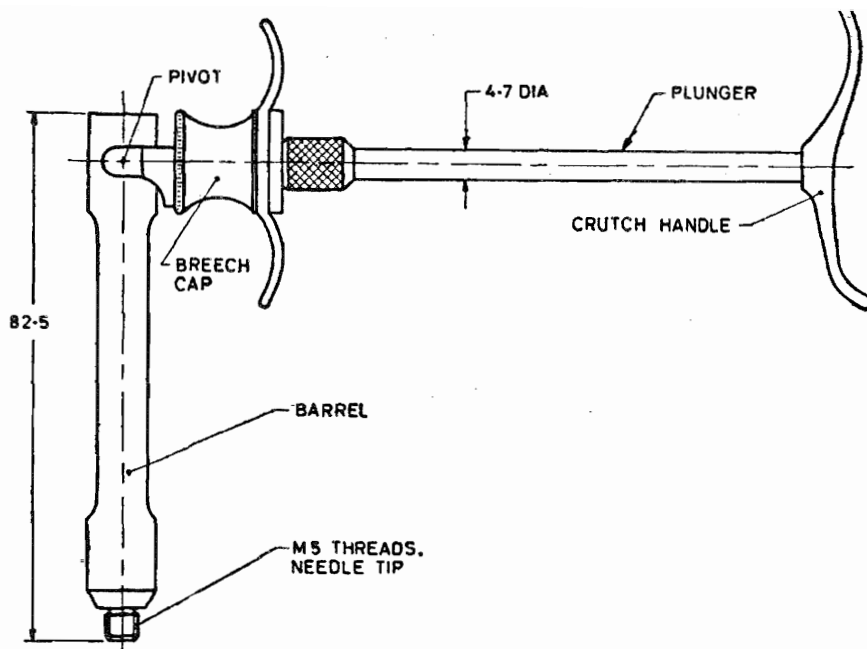
2. **Shape and Dimensions** — As shown in Fig. 1 and 2.



All dimensions in millimetres.

FIG. 1 SYRINGE, HYPODERMIC, CARTRIDGE, PIVOT BREECH CAP TYPE

*Specification for needles, hypodermic, dental.



All dimensions in millimetres.

FIG. 2 SYRINGE, HYPODERMIC, CARTRIDGE, SHOWING BREECH ACTION

3. Material

3.1 Barrel — Brass tube conforming to Alloy No. 2 (Designation CuZn39) of IS : 407-1966*. The outside diameter and wall thickness of the brass tube shall be 12 and 0.8 mm respectively.

3.2 All other Components — Brass rods conforming to Designation CuZn38Pb3 of IS : 319-1968†.

4. Requirements

4.1 Breech Cap — Syringes shall be breech loading type and the breech cap shall pivot to allow the cartridge, 77 mm long and 9.1 mm in diameter containing anaesthetic solution to be freely inserted into the barrel of the syringe and shall contain a swivel type finger hold grip.

4.2 Needle Tip of the Barrel — Shall have M5 threads and counterbored to form a seat for the head on the needle.

4.3 Hubs — One short and one long hub shall be provided with each syringe. The hub shall be bored for cartridge needles specified in IS : 5180-1969‡, counterbored for the seat for the head on the needle, and shall have M5 threads, to fit the needle tip of the barrel.

5. Workmanship and Finish

5.1 The finished syringe shall be free from defects which impair their appearance, use or durability.

5.2 The heads of the pivots shall be flush with the breech cap and shall be of such construction that they will not become dislodged when in use. Screws if used as pivot, shall be expanded or swelled so that they cannot be removed with a screw driver.

5.3 The syringe shall be easily and readily disassembled for complete sterilization.

5.4 The plunger shall be securely brazed to handle and finished smooth.

5.5 The syringe shall be plated chromium over nickel and the plating shall conform to Service Grade No. 2 of IS : 4827-1968§.

6. Marking — Each syringe shall be marked with manufacturer's name, initials or trade-mark; and country of manufacture.

6.1 ISI Certification Marking — Details available from the Indian Standards Institution ,

7. Packing — The syringe shall be either wrapped in wax paper or put in polyethylene bag and then packed in cartons in accordance with trade practice or the packing may be done as agreed to between the purchaser and the supplier.

*Specification for brass tubes for general purposes (second revision).

†Specification for free-cutting brass rods and sections (second revision).

‡Specification for needles, hypodermic, dental.

§Specification for electroplated coatings of nickel and chromium on copper and copper alloys.